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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 068,094	02/05/2002	Senichi Kusumoto	020619	7488

23850 7590 03/19/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP
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EXAMINER

DUONG, THOI V

ART UNIT PAPER NUMBER

2871

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,094

Examiner

Thoi V Duong

Applicant(s)

KUSUMOTO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

DETAILED ACTION

1. This office action is in response to the Request for New Office Action, Paper No. 8, filed December 4, 2002, and the Response under 37 CFR 1.111, Paper No. 9, filed December 23, 2002.

Accordingly, the preliminary amendment filed on February 5, 2002 is entered and considered. Currently, claims 1-16 are pending in this application with the following new office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitaura et al. (USPN 5,087,985) in view of Okada (JP401078236A).

Kitaura discloses a polarizing plate comprising a stretched film containing iodine (col. 2, lines 23-44) and a transparent protective film (col. 2, lines 45-49), which is used for a liquid crystal display (col. 1, lines 19-26),

wherein the thickness of the transparent protective film is from 25-200 micrometers (col. 2, lines 45-52);

wherein the transparent protective layer contains transparent particles from the group consisting of inorganic particles such as silica (col. 2, lines 62-68); and

wherein, as shown in Fig. 1, an absorption peak at 600 nm in a wavelength range of 550 to 650 nm and an absorption peak at 450 nm in a wavelength range of 450 to 520 nm are about 0.5. Accordingly, the polarizing plate has extremely small differences between the maximum and minimum light transmittances over the whole visible light region of 450-650 nm; therefore, an absorbance characteristics ratio of ((an absorption peak in a wavelength range of 550 to 650 nm)/(an absorption peak in a wavelength range of 450 to 520 nm)) is no more than 1.5.

Kitaura discloses a polarizing plate that is basically the same as that recited in claims 1, 2 and 7 except for arranging the polarizing plate in a crossed Nicol. Okada discloses a liquid crystal element wherein a polarizing plate is arranged in a crossed Nicol to improve contrast and brightness of the display (see Abstract). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the polarizing film of Kitaura with the teaching of Okada by arranging the film in a crossed Nicol so as to improve the contrast and brightness of the display.

4. Claims 3-6, 8, 9, 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitaura et al. (USPN 5,087,985) in view of Okada (JP401078236A) as applied to claims 1, 2 and 7 above and further in view of Suzuki et al. (USPN 6,033,743).

The polarizing plate of Kitaura as modified in view of Okada above includes all that is recited in claims 3-6 except for forming a hard coat layer, an adhesive layer, and a retardation plate on the polarizing plate. As shown in Fig. 3, Suzuki discloses an antireflection film used with a polarizing film, comprising a transparent substrate 11, a

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hard coating layer 15 on an external surface of the transparent protective layer through an adhesive layer 14, and an ultrafine particle layer 22 (brightness enhanced plate).

Suzuki discloses that a resin composition which has excellent dispersibility of ultrafine particles may be used in any of the hard coating layer 15, the layer 22 and the layer 13 to prevent whitening (col. 1, lines 53-59; col. 3, lines 43-58). In addition, in Fig. 5, Suzuki discloses that a retardation plate is inserted into between a liquid crystal display element 6 and a polarizing film 5 (col. 9, lines 65-67) for enhancing the display brightness. Finally, the materials for the adhesive layer such as silicone series polymer, rubber series polymer are well known in the art.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the polarizing plate of Kitaura with the teaching of Suzuki by forming a hard coating layer comprising transparent particles in dispersed state so as to obtain a display with low whitening, excellent transparency, and excellent antireflection effect.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong



03/15/2003

